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NEWS	3	JUN	01	CAS REGISTRY Source of Registration (SR) searching
				enhanced on STN
NEWS	4	JUN	26	NUTRACEUT and PHARMAML no longer updated
NEWS				IMSCOPROFILE now reloaded monthly
NEWS				EPFULL adds Simultaneous Left and Right Truncation
112110	•	0011		(SLART) to AB, MCLM, and TI fields
NEWS	7	JUL	09	PATDPAFULL adds Simultaneous Left and Right
				Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS	8	JUL	14	USGENE enhances coverage of patent sequence location
				(PSL) data
NEWS	9	JUL	27	CA/CAplus enhanced with new citing references
NEWS	10	JUL	16	GBFULL adds patent backfile data to 1855
NEWS	11	JUL	21	USGENE adds bibliographic and sequence information
NEWS	12	JUL	28	EPFULL adds first-page images and applicant-cited
				references
NEWS	13	JUL	28	INPADOCDB and INPAFAMDB add Russian legal status data
NEWS	14	AUG	10	Time limit for inactive STN sessions doubles to 40
				minutes
NEWS	15	AUG	18	COMPENDEX indexing changed for the Corporate Source
				(CS) field
NEWS	16	AUG	24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	17	AUG	24	CA/CAplus enhanced with legal status information for
				U.S. patents
NEWS	18	SEP	0.9	50 Millionth Unique Chemical Substance Recorded in
				CAS REGISTRY
NEWS	19	SEP	11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM
		~		thesaurus
NEWS	EXP	RESS	MAY	26 09 CURRENT WINDOWS VERSION IS V8.4,
				CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.
				OUTSIDE DESCRIPTION OF STREET OF STREET

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FILE 'HOME' ENTERED AT 13:47:19 ON 29 SEP 2009

=> FILE REG

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STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6
DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

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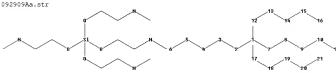
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http://www.cas.org/support/stngen/stndoc/properties.html

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chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

chain bonds :

1-2 1-7 1-12 1-17 2-3 3-4 4-5 5-6 7-8 8-9 9-10 10-11 12-13 13-14 14-15 15-16 17-18 18-19 19-20 20-21

exact/norm bonds :

2-3 4-5 5-6 7-8 9-10 10-11 12-13 14-15 15-16 17-18 19-20 20-21 exact bonds :

1-2 1-7 1-12 1-17 3-4 8-9 13-14 18-19

Match level:
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 16:CLASS 17:CLASS 16:CLASS 19:CLASS 20:CLASS 21:CLASS 21:CLASS

L1 STRUCTURE UPLOADED

=> D

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

2 ANSWERS

=> S L1 SSS SAM

SAMPLE SEARCH INITIATED 13:48:00 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 37 TO ITERATE

100.0% PROCESSED 37 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 376 TO 1104

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> S L1 SSS FULL

FULL SEARCH INITIATED 13:48:06 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 887 TO ITERATE

100.0% PROCESSED 887 ITERATIONS 18 ANSWERS

SEARCH TIME: 00.00.01

L3 18 SEA SSS FUL L1

=> FILE CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION 185.88 186.10

FILE 'CAPLUS' ENTERED AT 13:48:12 ON 29 SEP 2009
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FILE COVERS 1907 - 29 Sep 2009 VOL 151 ISS 14 FILE LAST UPDATED: 28 Sep 2009 (20090928/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> S L3 L4 37 1.3

=> D L4 1-37 IBIB ABS HITSTR

L4 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:513536 CAPLUS Full-text

DOCUMENT NUMBER: 145:19143

TITLE: Semiconductor device fabrication and substrate

treatment apparatus

INVENTOR(S): Sano, Atsushi; Horii, Sadavoshi; Itatani, Hideharu;

Yamamoto, Katsuhiko

PATENT ASSIGNEE(S): Hitachi Kokusai Electric Inc., Japan

PCT Int. Appl., 27 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

SOURCE:

PATENT INFORMATION:

| PAT | ENT : | NO. | | | KIN | D | DATE | | - 2 | APPL | ICAT | I NOI | NO. | | D | ATE | |
|-----|-------|------|-----|-----|-----|-----|------|------|-----|------|------|-------|-----|-----|-----|------|-----|
| | | | | | | _ | | | | | | | | | - | | |
| WO | 2006 | 0574 | 00 | | A1 | | 2006 | 0601 | 1 | WO 2 | 005- | JP21 | 855 | | 2 | 0051 | 129 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SC, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, SW, GM, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 20080032514 A1 20080207 US 2007-791222 20070629

PRIORITY APPLN. INFO::

US 2008-JP21855 W 20051129
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AB A high quality semiconductor device is manufd. by controlling the metal/Si concentration ratio in high-k metal silicate films. The process involves controlling the feed rate ratio between a metal-containing lst reactant and a Si/N-containing 2nd reactant in a reaction chamber to control the metal/Si concentration ratio in the metal silicate film which is deposited on a substrate. The lst and 2nd reactants may be Hf(CCMeCH2OMe)4 and Si(CCHMeCH2NMe2)4, resp., for improved controlling in Hf/Si ratio, even varied concentration distribution through film thickness direction in the HfSi0

films. IT 28911-46-8

> RL: RCI (Reactant); RACI (Reactant or reagent) (semiconductor device fabrication and substrate treatment apparatus by MOCVD deposition of hafnium silicate films)

RN 28911-46-8 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:1004690 CAPLUS Full-text

DOCUMENT NUMBER: 143:316927

TITLE: Alkoxide compound, raw material for thin film formation and process for producing thin film

INVENTOR(S): Sato, Hiroki; Sakurai, Atsushi
PATENT ASSIGNEE(S): Asahi Denka Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2005085175
                       A1 20050915 WO 2005-JP2118
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
            SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
            RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
            MR, NE, SN, TD, TG
                                        CN 2005-80004018
    CN 1914150
                        A
                            20070214
                                                               20050214
                            20070215
    DE 112005000134
                        Т5
                                        DE 2005-112005000134
                                                              20050214
                       A1 20090205 US 2006-588187
    US 20090035464
                                                               20060802
    KR 2006111694
                       A
                             20061027 KR 2006-716119
                                                               20060810
PRIORITY APPLN. INFO.:
                                         JP 2004-41427
                                                           A 20040218
                                         WO 2005-JP2118
                                                           W 20050214
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OTHER SOURCE(S): MARPAT 143:316927

B An alkoxide compd. is described, that is represented by the following general formula M[OCR1R2ANR3R4]n, where one of Rl and R2 is a Cl-C4 alkyl while the other is a H atom or Cl-C4 alkyl; each of R3 and R4 is a Cl-C4 alkyl; A is a Cl-C3 alkanediyl; M is a Si or Hf atom; and n is 4, and is suitable to a raw material for thin film formation for use in a process of thin film formation though compound evaporation, such as CVD process. Further, there is provided a raw material for thin film formation comprising the above alkoxide compound Still further, there is provided a process for producing a thin film, comprising vaporizing the above raw material for thin film formation to thereby obtain a vapor containing the alkoxide compound, introducing the vapor onto a substratum, and performing decomposition and/or chemical reaction thereof to thereby form a thin film on the substratum.

IT 28911-46-8P 864656-16-6P

RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(alkoxide compound, raw material for thin film formation and process for producing thin film)

RN 28911-46-8 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)

RN 864656-16-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1,1-dimethylethyl] ester
(9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:972041 CAPLUS Full-text

DOCUMENT NUMBER: 140:17633

TITLE: Alkylaminosiloxanes as corrosion inhibitors

INVENTOR(S): Piccinelli, Piero; Gardi, Stefano; Da Roit, Giovanni

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.; Ciba

Specialty Chemicals S.p.A. SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

OTHER SOURCE(S):

| | | ENT I | | | | | | | | | | LICAT | | | | | ATE | |
|-------|-----|-------|------|------|-----|-----|-----|------|------|-----|----|-------|------|------|--------|-----|------|-----|
| | WO | 2003 | 1019 | 47 | | A2 | | 2003 | 1211 | | | 2003- | | | | | 0030 | |
| | wo | | | | | | | | | | | - 50 | - | D11 | D.C. | 0.7 | 0 | 011 |
| | | w: | | | | | | | | | | , BG, | | | | | | |
| | | | | | | | | | | | | , EE, | | | | | | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE | , KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN | , MW, | MX, | MZ, | NI, | NO. | NZ, | OM, |
| | | | PH. | PL. | PT. | RO. | RU. | SC. | SD. | SE. | SG | , SK, | SL. | TJ. | TM. | TN. | TR. | TT. |
| | | | | | | | | | | | | ZM, | | , | , | , | , | , |
| | | DW. | | | | | | | | | | , TZ, | | 73.4 | 77.147 | 234 | 2.7 | DV |
| | | EW: | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | , СН, | | | | | | |
| | | | FΙ, | FR, | GB, | GR, | HU, | ΙE, | ΙT, | LU, | MC | , NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ | , GW, | ML, | MR, | NE, | SN, | TD, | TG |
| | CA | 2484 | 332 | | | A1 | | 2003 | 1211 | | CA | 2003- | 2484 | 332 | | 2 | 0030 | 522 |
| | AIJ | 2003 | 2425 | 59 | | A1 | | 2003 | 1219 | | AU | 2003- | 2425 | 59 | | 2 | 0030 | 522 |
| | | | | | | | | | | | | 2003- | | | | | | |
| | | | | | | | | | | | | , IT, | | | | | | |
| | | | | | | | | | | | | , TR, | | | | | | / |
| | | 0005 | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 2004- | | | | | | |
| | | | | | | | | | | | US | 2004- | 5161 | 28 | | 2 | 0041 | 129 |
| | US | 7498 | 293 | | | B2 | | 2009 | 0303 | | | | | | | | | |
| PRIOR | ITY | APP: | LN. | INFO | . : | | | | | | ΕP | 2002- | 4054 | 41 | | A 2 | 0020 | 531 |
| | | | | | | | | | | | WO | 2003- | EP53 | 72 | | W 2 | 0030 | 522 |

1 The instant invention discloses a compn. comprising a carrier, preferably a packaging material, and ≥1 silane corrosion inhibitors for protecting metallic surfaces. Thus, 60 g 1-dodecene and 62.7 g trichlorosilane were reacted in the presence of 3 mL 2% hexachloroplatinic acid solution to give 90 g trichlorododecyleilane, 60 g of which was reacted with 87.5 g N,N-diethylaminoethanol to give tri(N,N-diethylaminoethoxy)dodecylsilane showing good corrosion inhibition against a steel specimen.

MARPAT 140:17633

IT 18867-06-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses) (preparation of alkylaminosiloxanes as corrosion inhibitors)

RN 18867-06-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1999:355636 CAPLUS Full-text

DOCUMENT NUMBER: 131:20307

TITLE: Aqueous polyester dispersions with stable viscosity, their preparation and use as binders for water-thinned

coatings

INVENTOR(S): Weinberger, Manfred; Billiani, Johann

PATENT ASSIGNEE(S): Vianova Resins A.-G., Austria; Surface Specialties
Austria GmbH

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------|------|----------|------------------------|-------------|
| EP 919587 | A1 | 19990602 | EP 1998-122211 | 19981123 |
| EP 919587 | B1 | 20040211 | | |
| | | | GB, GR, IT, LI, LU, NL | SE, MC, PT, |
| IE, SI, LT,
US 6008291 | A A | 19991228 | US 1998-190443 | 19981113 |
| AT 259393 | T | 20040215 | AT 1998-122211 | 19981123 |
| PRIORITY APPLN. INFO.: | - | =0010=10 | AT 1997-2018 | A 19971128 |
| | | | EP 1998-122211 | A 19981123 |

AB The dispersions contain (1) a polyester resin contg. acid groups, (2) NRI3, an amine, an alkali, or an alkaline earth metal hydroxide as neutralizing agent in 10-200% excess over that required to neutralize the acid groups of 1, (3) optionally organic cosolvents, (4) an aqueous SiO2 dispersion in the amount of 0.1-50% of the amount of polyester, and (5) water. Thus, 420 parts of an acrylate-modified alkyd resin (acid number 50 mg/q) as an 87% solution in BUOCHZCHZOH was dispersed in a solution of 19.5 parts 25% NH4OH and 48.5 parts Klebosol R 30 (30% aqueous SiO2 dispersion) in 512 parts H2O to give a dispersion (pH 8.4, 38% solids) with viscosity 8500 mPa-s initially and 8400 mPa-s after 18 mo at room temperature in a closed container, whereas in the absence of the SiO2 the viscosity dropped from 9000 to .apprx.2000 mPa-s during similar storage.

IT 18536-49-7D, Tetrakis[2-(dimethylamino)ethoxy]silane, hydrolyzed

RL: MOA (Modifier or additive use); USES (Uses)
(silica-containing aqueous polyester dispersions with stable viscosity)

RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

RECORD. ADD CITATIONS AVAILABLE IN THE RE FOR

L4 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1994:703162 CAPLUS Full-text

DOCUMENT NUMBER: 121:303162

ORIGINAL REFERENCE NO.: 121:55461a,55464a
TITLE: Siloxane release coating for cooking utensils

INVENTOR(S): Nebesar, Karel; Zadak, Zdenek; Krizkova, Eva

PATENT ASSIGNEE(S): Lucebni Zavodv S. P. Kolin, Czech Rep.

SOURCE: Czech Rep., 6 pp.

CODEN: CZXXED
DOCUMENT TYPE: Patent

LANGUAGE: Czech
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| CZ 278188 | В6 | 19930915 | CZ 1991-3415 | 19911112 |
| PRIORITY APPLN. INFO.: | | | CZ 1991-3415 | 19911112 |

AB The title coating comprises a (1-5):1 mixt. of 2 OH-contq. Me Ph siloxame resins where the 1st resin (A) is precondensed and comprises R:6i ratio of 1.6 (R = Me, Ph; Me:Si = 0.91; Ph:Si = 1.35), and the 2nd resin (B) is not precondensed and has R:Si ratio of 1.5 (R as above; Me:Si = 0.37; Ph:Si = 1.13). The above mixture (100 parts) is blended with 10-100 parts MeSi(OEt)3 crosslinking agent, 30-70 parts PhMe, xylene, white spirit, or MeZCO solvent, and also S5 parts Si(OCHZCHEXNET2)4 (I) catalyst, S20 parts pigment, e.g. TiO2 (rutile), carbon black, Fe oxide red or black, and 550 parts filler, e.g. graphite, or (surface-modified) powdered mica. Thus, a composition containing a 2.6:1 A/B siloxane mixture (50% solution in PhMe) 200, I 30, and acetylene carbon black 2 g was ground for 16 h in a ball mill, pearlescent mica (5 g) was stirred into the mixture and homogenized, the resulting composition spray-coated on an Al substrate, and cured for 10 min at 300° to give a tough and resilient film.

IT 18867-06-6, Tetra[2-(diethylamino)ethoxy]silane

RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinking agent; silicon release coating for cooking utensils)

RN 18867-06-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1987:534825 CAPLUS Full-text

DOCUMENT NUMBER: 107:134825

ORIGINAL REFERENCE NO.: 107:21801a,21804a

TITLE: Silicate catalysts for the formation of isocyanurates

INVENTOR(S): Ashida, Kaneyoshi
PATENT ASSIGNEE(S): BP Chemicals Ltd., UK

SOURCE: Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PR GI

| PA7 | TENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------|----------------|---------|----------|------------------|----------|
| | | | | | |
| EP | 169708 | A2 | 19860129 | EP 1985-305120 | 19850718 |
| EP | 169708 | A3 | 19870204 | | |
| EP | 169708 | B1 | 19891108 | | |
| | R: BE, DE, FR, | GB, IT, | NL | | |
| RIORITY | APPLN. INFO.: | | | US 1984-635280 A | 19840727 |

- AB The silicates Si[OZ1NR2]4 or I (R = alkyl; Z1 = C2-4 alkylene) are catalysts for trimerization of isocyanates to isocyanurates or formation of isocyanurate groups in isocyanate condensation polymers. Refluxing 0.1 mol PhNCO, 0.01 mol Si(OCHZCHZNMe2)4, and 40 mL C6H6 for 5 h gave 63% tri-Ph isocyanurate.
- RN 18536-49-7 CAPLUS
- CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

- RN 18867-06-6 CAPLUS
- CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1982:616453 CAPLUS Full-text

DOCUMENT NUMBER: 97:216453

ORIGINAL REFERENCE NO.: 97:36341a,36344a

TITLE: Synthesis of some nitrogen-containing organosilicon compounds of spiro-cyclic and branched structure

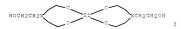
AUTHOR(S): Kondrashov, G. A.; Kondrashova, L. I.

CORPORATE SOURCE: USSR

SOURCE: Deposited Doc. (1981), SPSTL 185 khp-D81, 5 pp. Avail.: SPSTL

DOCUMENT TYPE: Report
LANGUAGE: Russian

GI



- AB Spiro compd. I was prepd. in 98% yield by heating 0.7 mol (EtO)4Si with 1.4 mols N(CH2CH2OH)3 (II) at 170°. Heating 0.25 mol (EtO)4Si with 1 mol II at 140-60° qave 98% Si[CCH2CH2N(CH2CH2OH)2]4.
 - T 18985-35-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

- RN 18985-35-8 CAPLUS
- CN Silicic acid (H4SiO4), tetrakis[2-[bis(2-hydroxyethyl)amino]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \mathsf{CH}_2-\mathsf{CH}_2-\mathsf{OH} \\ \mathsf{CH}_2-\mathsf{CH}_2-\mathsf{OH} \\ \mathsf{CH}_2-\mathsf{CH}_2-\mathsf{OH} \\ \mathsf{HO}-\mathsf{CH}_2-\mathsf{CH}_2-\mathsf{CH}_2-\mathsf{OH} \\ \mathsf{CH}_2-\mathsf{CH}_2-\mathsf{CH}_2-\mathsf{OH} \\ \mathsf{CH}_2-\mathsf$$

L4 ANSWER 8 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1982:528671 CAPLUS Full-text

DOCUMENT NUMBER: 97:128671

ORIGINAL REFERENCE NO.: 97:21377a,21380a

TITLE: Molding compositions stabilized against thermolysis with a low monomer content

INVENTOR(S): Buysch, Hans Josef; Pischtschan, Alfred; Humme, Gert; Ott. Karl Heinz

PATENT ASSIGNEE(S):

Bayer A.-G. , Fed. Rep. Ger. SOURCE: Ger. Offen., 25 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent German LANGUAGE .

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: DATENT NO

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-------------------|----------|
| | | | | |
| DE 3047443 | A1 | 19820722 | DE 1980-3047443 | 19801217 |
| EP 56115 | A2 | 19820721 | EP 1981-110187 | 19811205 |
| EP 56115 | A3 | 19830316 | | |
| R: BE, DE, FR, | GB, IT | , NL | | |
| JP 57125235 | A | 19820804 | JP 1981-200269 | 19811214 |
| PRIORITY APPLN. INFO.: | | | DE 1980-3047443 A | 19801217 |
| OTHER SOURCE(S): | MARPAT | 97:128671 | | |
| GI | | | | |

- AB Heat stabilizers such as 4-[(4-amino-3-methylcyclohexyl)methyl]-3-methoxy-1cyclohexanamine [83048-36-6], H2N(CH2)5CONH(CH2NH)5H (I) [83048-39-9], C17H35CONH(CH2CH2NH)3H [32582-85-7], Me2Si(OCH2CH2NH2)2 [15942-80-0], compound II [83048-40-2], P[O(CH2CH2NH)2H13 [83048-41-3], and amino groupcontaining polymers are added to acrylonitrile-butadiene- α -methylstyrenestyrene copolymer (III) [25120-20-1] and/or ABS polymer [9003-56-9]. The stabilized polymers contain less monomer after thermal aging than did copolymers containing no stabilizer. Thus, a 26:13:52:9 III containing 1% I contained 93 ppm acrylonitrile and 600 ppm styrene after a 19 s molding cycle at 280, compared with 260 ppm acrylonitrile and 850 ppm styrene for II containing no I.
- ΤТ 83048-37-7
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (heat stabilizers, for acrylonitrile-butadiene-styrene copolymers)
- RN 83048-37-7 CAPLUS
- Silicic acid (H4SiO4), tetrakis[2-[(2-aminoethvl)aminolethvl] ester (9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

(2 CITINGS

L4 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1982:85636 CAPLUS Full-text

DOCUMENT NUMBER: 96:85636

ORIGINAL REFERENCE NO.: 96:14063a,14066a

TITLE: Synthesis of carbofunctional organosilicon compounds.

Silicon-containing formamides

AUTHOR(S): Sheludyakov, V. D.; Kirilina, N. I.; Kuznetsova, M.

G.; Kisin, A. V.; Kirilin, A. D.

CORPORATE SOURCE: USSR

SOURCE: Zhurnal Obshchei Khimii (1981), 51(8), 1824-9

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 96:85636

AB Si-contg formamides were prepd. by reaction of org. formates with N-containing compds. Thus, heating (Me3SiOCH2CH2)2NH with CH2:CHCH2O2CH gave 88% (Me3SiOCH2CH2)2NOCH.

IT 77225-31-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 77225-31-1 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(formylamino)ethyl] ester (9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L4 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1981:157002 CAPLUS Full-text

DOCUMENT NUMBER: 94:157002

ORIGINAL REFERENCE NO.: 94:25677a,25680a
TITLE: 94:25677a,25680a
Synthesis of carbofunctional organosilicon compounds.

Silicon-containing amides and formamides

AUTHOR(S): Sheludyakov, V. D.; Kirilina, N. I.; Paushkin, Ya. M.;

Kirilin, A. D.

CORPORATE SOURCE: Gos. Nauchno-Issled. Inst. Khim.-Tekhnol. Elementoorg.

Soedin., Moscow, USSR

SOURCE: Doklady Akademii Nauk SSSR (1980), 254(6), 1412-16

[Chem.]

CODEN: DANKAS; ISSN: 0002-3264

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 94:157002

AB Fifteen title compds., e.g. Me3SiCH2NBz2 (I), Me3SiOCH2CH2NHCHO, were prepared by various methods. Thus, treating Me3SiCH2N(SiMe3)2 with BzCl gave 90% of I.

IT 77225-31-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 77225-31-1 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(formylamino)ethyl] ester (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1979:592819 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 91:192819

ORIGINAL REFERENCE NO.: 91:31043a,31046a

TITLE: Chlorides of tetrakis(trialkylaminoalkoxy)silanes and hydrochlorides of tetrakis(dialkylaminoalkoxy)silanes

INVENTOR(S): Mazur, Andrzej; Janczarski, Ireneusz; Rosciszewski,

Pawel

PATENT ASSIGNEE(S): Akademia Medyczna, Warszawa, Pol.

SOURCE: Pol., 3 pp. CODEN: POXXA7

DOCUMENT TYPE: Patent LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---------|---------------|-------------------------|-------------|
| | | | | |
| PL 100405 | B1 | 19781031 | PL 1975-180610 | 19750523 |
| PRIORITY APPLN. INFO.: | | | PL 1975-180610 A | 19750523 |
| AB Si(OZN+R2R1)4 4C1- | (R = Me | e, Et, Pr; Ri | 1 = H, R; Z = C2-C5 alk | ylene) were |

prepared by treating HGZM+RZRI C1- with SiCl4 at \$10° in an inert solvent, removing the excess HC1, extracting the product into H2O, concentrating and crystallizing Thus, 55.9 g (0.4 mol) dry choline chloride was saturated with dry HC1 until a liquid consistency was reached, 100 mL dry ClCH2CH2Cl added, the solution cooled to 10° and added to 17 g (0.1 mol) SiCl4 in 100 mL ClCH2CH2Cl at 0°, the mixture refluxed to remove the HC1 until crystallization ceased and poured into ice-H2O, the layers separated and the aqueous layer concentrated to give \$i(CCH2CH2NM83+) 4 Cl--.

IT 71868-26-3P 71868-27-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) RN 71868-26-3 CAPLUS

CN 5,7-Dioxa-2-aza-6-silanonane-9-triaminium,

N9, N9, N9, 2, 2-pentamethyl-6, 6-bis [2-(trimethylammonio)ethoxy]-, chloride (1:4) (CA INDEX NAME)

4 (1-

71868-27-4 CAPLUS RN

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester, tetrahydrochloride (9CI) (CA INDEX NAME)

■4 HC1

L4 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1979:114916 CAPLUS Full-text

DOCUMENT NUMBER: 90:114916

ORIGINAL REFERENCE NO.: 90:18015a,18018a

TITLE: Biological activity of nitrogen-containing organosilicon compounds

AUTHOR(S): Lukevics, E.

CORPORATE SOURCE: Inst. Org. Synth., Riga, USSR SOURCE:

Nobel Symposium (1978), Volume Date 1977, 40 (Biochem.

Silicon Relat. Probl.), 435-45

CODEN: NOSYBW; ISSN: 0346-8313

Journal

DOCUMENT TYPE: LANGUAGE: English

AB The silvlation of 2-dibutylaminoethanol to form aminoalkoxysilanes enhanced insect repellent activity against Xenopsylla cheopis. Similar activity was observed with dibutylaminomethylsilanes. Structure-activity relationships for these compds, are discussed. The 3 cyclic organosilicon derivs, of triethanolamine (silatranes) tested increased the formation of proteins and collagen in cartilaginous tissue of chick embryos. However, the silatrane derivs, did not influence the activity of collagen prolyl-hydroxylase. The relationship between the fungistatic and bacteriostatic activities of organosilacon amines and their structures were investigated. The fungistatic activity of primary, secondary, and tertiary aliphatic and heterocyclic amines depended on the distance between the Si and N atoms. The saturated amines produced more activity than the corresponding ethylene and acetylene derivs. Primary and secondary amines had more activity than the corresponding tertiary amines. Organosilicon compds with antibacterial and fungistatic activity greater than nystatin, but with less toxicity were found.

18846-62-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (insect-repellent activity of)

18846-62-3 CAPLUS RN

Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

L4 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1977:5520 CAPLUS Full-text

DOCUMENT NUMBER: 86:5520

ORIGINAL REFERENCE NO.: 86:959a,962a
TITLE: Nitrogen-containing or

TITLE: Nitrogen-containing organosilicon compounds. LIV.
Synthesis and insect repellent activity of

organosilicon derivatives of amino alcohols
AUTHOR(S): Lukevics, E.; Dremova, V. P.; Smirnova, S. N.

CORPORATE SOURCE: Inst. Org. Sint., Riga, USSR

SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija

(1976), (4), 454-7

CODEN: LZAKAM; ISSN: 0002-3248
DOCUMENT TYPE: Journal

LANGUAGE: Journal Russian

AB Twenty aminoalkoxysilanes and hydroxyethylaminoalkylsilanes e.g.,

MenSi(OCH2CH2NBu2)4-n (I), n = 0-3) MeEt2SiCH2NR(CH2CH2OH) (R = H, Bu, ally1)
were prepared and their insect repellant activities tested. Thus, heating
Me3SiNEt2 with HOCH2CH2NBu2 gave 908 I (n = 3). Dialkylbis(2-

dibutylaminoethoxy)silanes showed high insect repellant activity over a period of 30 days.

IT 18846-62-3P 18867-06-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and insect repellant activity of)

RN 18846-62-3 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

RN 18867-06-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1977:1717 CAPLUS Full-text

DOCUMENT NUMBER: 86:1717

ORIGINAL REFERENCE NO.: 86:323a,326a

TITLE: Activity of cholinesterase included on silica gel AUTHOR(S): Janczarski, Ireneusz; Mazur, Andrzej; Witkowski,

Krzysztof; Lubaszka, Eugeniusz

CORPORATE SOURCE: Dep. Gen. Chem., Sch. Med., Warsaw, Pol.

SOURCE: Acta Physiologica Polonica (1976), 27(3), 301-6

CODEN: APYPAY; ISSN: 0044-6033

DOCUMENT TYPE: Journal

LANGUAGE: English

Cholinesterase (I) was immobilized in a silica gel prepd. by hydrolyzing an aqueous solution of tetrakis(diethylaminoethoxy)silane HCl and I to form a hydrated gel containing entrapped I. The biol. active gel was homogenized with Sephadex G-100 in water to obtain a semilig, mass with which the reactor was filled. I activity was determined by comparing the pH of the acetylcholine substrate solution entering the reactor with the pH of the reaction products leaving the reactor. The method was suitable for assays of acetylcholine concns. in a range from 10-4-10-2M. This method may be used for the detection of I inhibitors in air, water reservoirs, and rivers.

19494-29-2

RL: BIOL (Biological study)

(in enzyme immobilization)

19494-29-2 CAPLUS RN

Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester, hydrochloride (8CI, 9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O-CH}_2-\text{CH}_2-\text{NEt}_2\\ \text{Et}_2\text{N-CH}_2-\text{CH}_2-\text{CH}_2-\text{O-CH}_2-\text{CH}_2-\text{NEt}_2\\ \text{-CH}_2-\text{CH}_2-\text{NEt}_2 \end{array}$$

■x HCl

L4 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1976:75767 CAPLUS Full-text DOCUMENT NUMBER: 84:75767

ORIGINAL REFERENCE NO.: 84:12443a,12446a

TITLE: Composition of materials for wall coatings of flour

storehouses

AUTHOR(S): Kondrashov, G. A.; Il'vitskii, N. A.; Kuz'menko, N.

Ya.; Kuznetsova, V. P.

CORPORATE SOURCE: Krasnodar, Politekh, Inst., Krasnodar, USSR

SOURCE: Izvestiva Vysshikh Uchebnykh Zavedenii, Pishchevava

Tekhnologiya (1974), (6), 84-6

CODEN: IVUPA8: ISSN: 0579-3009

DOCUMENT TYPE: Journal

LANGUAGE: Russian

Diethoxybis[2-[bis(2-hydroxyethyl)amino]ethoxy]silane (I) [18407-76-6] and tetrakis[2-[bis(2-hydroxyethyl)amino]ethoxy]silane (II) [18985-35-8] can be used as hardeners for ED-20 [52519-66-1] epoxy resin coatings. These coatings are suitable for flour storage bins. I and II were synthesized in 98% yields

by reacting Si(OEt)4 [78-10-4] with HN(CH2CH2OH)2 [111-42-2] in 1:2 and 1:4 mol. ratios resp. The optimum concns. of I and II in ED-20 were 30 and 20% resp. Coatings obtained with these compns. on concrete had 0.24 + 1012 and 0.56 + 1012 ohm cm sp. volume resistance. The min. coated surface inclination angle at which flour began to slide due to gravity was 45.4°.

18985-35-8

RL: MOA (Modifier or additive use); USES (Uses) (crosslinking agents, for epoxy coatings for flour bins)

RN 18985-35-8 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-|bis(2-hvdroxvethvl)amino|ethvl] ester (9CI) (CA INDEX NAME)



L4 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1975:156435 CAPLUS Full-text

DOCUMENT NUMBER: 82:156435

ORIGINAL REFERENCE NO.: 82:24981a,24984a

TITLE: Nitrogen-containing organosilicon compounds. LI. Direction of the amino alcoholysis of difunctional

alkylsilanes and acetylation of aminoethoxysilanes

Lukevics, E.; Simchenko, L. I. AUTHOR(S):

Inst. Org. Sint., Riga, USSR CORPORATE SOURCE: SOURCE: Zhurnal Obshchei Khimii (1975), 45(1), 92-8

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Russian

The reaction of Et2NCH2CH2OH with difunctional alkylsilanes [e.g. Me2(EtO)SiC1, EtSiHC12, MeSiH(NEt2)2] gave N-containing compds. [e.g. Me2(EtO)SiOCH2CH2NEt2, EtSiH(OCH2CH2NEt2)2, MeSiH(OCH2CH2NEt2)2]. The reaction depends on the electrophilic nature of the Si atom and the bond energies of the Si-functional group bond. Ac20 reacts with Me3SiOCH2CH2NH2 to give Me3SiOCH2CH2NHAc which subsequently splits off the Me3Si group.

18867-06-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

18867-06-6 CAPLUS RN

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1975:42771 CAPLUS Full-text

DOCUMENT NUMBER: 82:42771
ORIGINAL REFERENCE NO.: 82:6801a,6804a

TITLE: Nitrogen-containing organosilicon compounds. XLV.

Spectroscopic study of the structure of 3-aminopropoxysilanes and N-substituted

2-aminoethoxysilanes

AUTHOR(S): Lukevics, E.; Popelis, J.; Simchenko, L. I.

CORPORATE SOURCE: Inst. Org. Sint., Riga, USSR

SOURCE: Zhurnal Obshchei Khimii (1974), 44(8), 1750-3

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB PMR and ir spectra (in DCCl3) of 15 (aminoalkoxy)silanes, e.g., Me3SiOCH2CH2NHCMe3, Me3SiOCHMeCH2NHSiMe3, Me3SiOCH2CH2NMe2, and

Me2Si[O(CH2)3NH2]2 showed the occurrence of $p\pi$ -d π interactions between 0 and Si in [2-(dimethylamino)ethoxy|silanes and (1-amino-2-propoxy)silanes, and between N and Si in [(trimethylsilv)|amino|alkoxy|silanes.

18536-49-7

RL: PROC (Process) (ir and NMR of)

RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1972:475256 CAPLUS Full-text

DOCUMENT NUMBER: 77:75256

ORIGINAL REFERENCE NO.: 77:12431a,12434a

TITLE: Nitrogen-containing organosilicon compounds. XXXI.

Silylation of aminopropanols and aminobutanols

AUTHOR(S): Lukevics, E.; Liberts, L.

CORPORATE SOURCE: Inst. Org. Synth., Riga, USSR

SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija

(1972), (2), 203-6

CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Silylation of HOZNR2 [Z = (CH2)3, CHMscH2, CH2CH2CHMs, CH2CHs2, R = H, Ms, Et] by (Ms3Si)2NH (I), Ms3SiNEt2 (II), hexamethylcylotrisialzane, MsGi(OEt)3, MeSi(OBu)3, and Si(OEt)4 in the presence of Na at 110-50° afforded the

corresponding MenSi(OZNR2)4-n in 41.7-82.5% yield, similarly, (HOCH2)2CMenH2 and I gave 78.6% (Me3SiOCH2)2CMenH2(III). Silylation of Me3SiOZNH2 [Z = (CH2)3, CHMeCH2] and III by II gave the N, 0-bis(trimethylsily) derivs in

41.5-75.3% yield. II 28911-46-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 28911-46-8 CAPLUS

$$\begin{array}{c} & \text{Me} \\ \text{Me} & \text{O-EH-CH}_2\text{-NMe}_2 \\ \text{Me}_2\text{N-CH}_2\text{-EH-O-S}_1\text{-O} \\ \text{Me}_2\text{N-CH}_2\text{-CH-O-S}_2\text{-EH-CH}_2\text{-NMe}_2 \\ \text{Me} & \text{Me} \end{array}$$

L4 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1971:514472 CAPLUS Full-text

DOCUMENT NUMBER: 75:114472 ORIGINAL REFERENCE NO.: 75:18067a,18070a

TITLE: Nitrogen-containing organosilicon compounds. XXVII.

Vibrational spectra of some aminoethoxysilanes Ignatova, V. A.; Kovalev, I. F.; Voronkov, M. G.; AUTHOR(S):

Liberts, L.; Lukevics, E.

CORPORATE SOURCE: Saratov. Pedagog. Inst., Saratov, USSR

SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija

(1971), (3), 321-8 CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal

LANGUAGE: Russian

The ir and Raman spectra of 8 aminoethoxysilanes of the type Me4-AB nSi(OCH2CH2NH2)n and [Me3SiOCH2CH2]nNH3-n, where n = 1-3 and of trimethyl[2-(dibutylamino)ethoxy]silane, tetrakis[2-(diethylamino)ethoxy]silane, and tris[2-(triethylsiloxy)ethyl]amines were measured in the pure liquid state and in CC14 solns. The ir frequencies and integrated intensities of the

characteristic absorption bands are given. 18867-06-6

RL: PRP (Properties) (spectrum of, vibrational)

18867-06-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1970:509835 CAPLUS Full-text

DOCUMENT NUMBER: 73:109835

ORIGINAL REFERENCE NO.: 73:17883a,17886a

TITLE: Aminoalkoxysilanes. I. Amino derivatives of alkoxyand alkylalkoxysilanes

AUTHOR(S): Mehrotra, Ram C.; Bajaj, P.

Chem. Lab., Univ. Rajasthan, Jaipur, India CORPORATE SOURCE:

SOURCE: Journal of Organometallic Chemistry (1970), 24(3), 611-21

CODEN: JORCAI; ISSN: 0022-328X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB (Aminoalkoxy)silanes were prepd. by alcoholysis of tetraethoxymethyltriethoxyand dimethyldiethoxysilane with aminoalcs. in the presence of the corresponding Na alcoholates. PMR and ir studies show that the compds. are tetrahedral.

(preparation of) RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

- RN 28911-46-8 CAPLUS
- CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)

- RN 28916-48-5 CAPLUS
- CN Ethanol, 2-(methylamino)-, tetraester with silicic acid (H4SiO4) (8CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH2-CH2-NHMe} \\ \text{MeNH-CH2-CH2-O-Si-O-CH2-NHMe} \\ \\ \text{CH2-CH2-NHMe} \end{array}$$

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)

L4 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2009 ACS ON STN ACCESSION NUMBER: 1970:44517 CAPLUS Full-text

DOCUMENT NUMBER: 72:44517 ORIGINAL REFERENCE NO.: 72:8204h,8205a

TITLE: Molded objects or coatings by polymerization of epoxide compounds containing several epoxide groups per molecule

INVENTOR(S): Feichtinger, Hans; Linden, Hanswerner

PATENT ASSIGNEE(S): Ruhrchemie A.-G. SOURCE: Fr., 7 pp.

CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------|-------------------|------|----------|-----------------|----------|
| | | | | | |
| | FR 1573484 | | 19690704 | FR | 19680705 |
| | GB 1208935 | | | GB | |
| PRIOR | ITY APPLN. INFO.: | | | DE | 19670708 |

PRIORITY APPIM. INFO.:

BH dradened epoxy resins with improved flexural strength, impact strength, chemical resistance, and thermal stability, useful for preparing coatings, paints, and laminates, are prepared by the catalytic polymerization of epoxy compds containing several epoxy groups/mol. in the presence of tetrakis(N,N - dimethylaminoethoxy) silane (1), tetrakis(N,N-dimethylaminopropoxy) silane, or tetrakis(N,N-d.2-tetramethylaminopropoxy) silane. Thus, 100 parts of a diglycidyl ether, epoxy number 0.529, prepared from epichlorohydrin and bisphenol A, was stirred with 2.5 parts I to give a clear yellow product with flexural strength 750-80 kg/cm2, impact strength 19-25 kg-cm/cm2, and Marten heat stability 113°, as compared to 300-800 kg/cm2, 9-13 kg-cm/cm2, and 89°

IT 18536-49-7, Silicic acid (H4SiO4),

tetrakis[2-(dimethylamino)ethyl] ester
RL: RCT (Reactant); RACT (Reactant or reagent)
 (crosslinking by, of epoxy resins)

RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

for an epoxy compound hardened with p-C6H4(CH2NMe2)2 instead of I.

L4 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1969:511085 CAPLUS Full-text

DOCUMENT NUMBER: 71:111085

ORIGINAL REFERENCE NO.: 71:20657a,20660a

TITLE: Structure-activity relations for aminoalkoxysilanes
AUTHOR(S): Lukevics, E.; Gutberga, S.; Liberts, L.; Kimenis, A.;

Voronkov, M. G.

CORPORATE SOURCE: Inst. Org. Sin., Riga, USSR

SOURCE: Latvijas PSR Zinatnu Akademijas Vestis (1969), (8),

60-3

CODEN: LZAVAL; ISSN: 0132-6422

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Twenty-seven aminoalkoxysilanes, 6 related amino alcs., and hexamethyldisiloxane were tested i.p. for acute toxicity and effects on rotarod performance in mice. Introduction of organosilyl groups into ethanolamine decreased the LDSO of the latter. With triethanolamine, introduction of such groups increased the LDSO. Introduction of organosilyl

groups into N,N-dialkylethanolamines generally increased the LD50. The ratios of the LD50 to the 50% effective doses for inhibiting rotarod performance were 12.6 and 11.3 for trimethyl[2-(diethylamino)ethoxy]silane and dimethylbis[2-(dimethylamino)ethoxy]silane, resp., but in many cases were only insignificantly >1 and for some were even <1.

18367-06-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmacology of)

RN 18867-06-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1968:49046 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 68:49046

ORIGINAL REFERENCE NO.: 68:9463a,9466a

Hydrochlorides of aminoalkyl esters of silcic acid INVENTOR(S): Janczarski, Ireneusz; Mazur, Andrzej; Gnat, Tadeusz

SOURCE: Pol., 3 pp. CODEN: POXXA7 DOCUMENT TYPE: Patent

LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| | | | | |
| PL 52717 | | 19670125 | PI. | 19641222 |

- AB The title compds, were prepd, in high yields in the reaction of alkylated aminoalcs, with SiCl4 in an anhydrous medium or in the reaction of alkylated amines with β -chloroethyl silicate (I). The compds, were examined in animals and found suitable for pharmaceutical use. Thus, (a) 90 g. freshly distilled Me2NCH2CH2OH was dissolved in 100 ml. C6H6, 42.4 g. freshly distilled SiCl4 dissolved in 75 ml. C6H6 was dropped in at 5° under stirring, and the mixture was boiled 3-4 hrs. and stirred with a N or CO2 stream. The product of the reaction was filtered off, washed with ligroin and dried at room temperature and under reduced pressure until an aqueous solution of the product showed pH ≤6. (b) Et2NH (101.5 g.) was added to 100 g. I and the mixture was heated at 100° under a pressure <15 atmospheric in a closed vessel during 24 hrs. The product obtained was filtered off, washed with ligroin, dried as before until disappearance of ligroin, and treated with dry HCl until and aqueous solution of the product has pH ≤6.
- 19494-28-1P 19494-29-2P (preparation of)

RL: SPN (Synthetic preparation); PREP (Preparation)

RN 19494-28-1 CAPLUS

Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester, CN hydrochloride (8CI) (CA INDEX NAME)

$$\begin{array}{c} o- CH_2- CH_2- NMe_2 \\ Me_2N- CH_2- CH_2- 0- Si- O- CH_2- CH_2- NMe_2 \\ - CH_2- CH_2- NMe_2 \end{array}$$

●x HCl

RN 19494-29-2 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester, hydrochloride (8CI, 9CI) (CA INDEX NAME)

●x HCl

L4 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1964:469742 CAPLUS Full-text

DOCUMENT NUMBER: 6

61:69742

ORIGINAL REFERENCE NO.: 61:12152e-g

Stabilized poly(oxymethylenes)

PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G. SOURCE: 10 pp.

DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

| GB 927610 | 1 | 19630529 GB | 1960-19619 | 19600602 |
|-----------------------|--------------|----------------|----------------------|------------|
| DE 1152541 | | DE | | |
| DE 1153896 | | DE | | |
| DE 1153898 | | DE | | |
| PRIORITY APPLN. INFO. | .: | DE | | 19590604 |
| AB Acylated or alk | ylated poly(| oxymethylene) | (I) may be thermally | stabilize |
| the addition of | (a) amines | and hydrazines | of formulas R1R2XN | and R1XNNR |

Acylated or alkylated poly(oxymethylene) (I) may be thermally stabilized by the addition of (a) amines and hydrazines of formulas RIRZNN and RIMNNRZR3, where X may be an ester, ether, thio ether carboxamide, urethane, acetal, or nitrate group or an organic radical bonded via Si; (b) amines and hydrazines of formulas RIRZRN and RIRZNNRZR4; (c) salts of dithiocarbamic acid; (d) cyclic diamines, with o-amine alkyl groups; (e) carboxamides and azines; and (f) aldehydes of tertiary aromatic amines. To 10 g. high-mol.-weight acetylated poly(oxymethylene) suspended in 60-100 g. Me2CO are added 0.4% beeswax and 2% triethanolamine triacetate (II). The Me2CO is removed with stirring, the mixture is shaken for 10 min., dried, and remixed. After melting at 200° for 2 min., the stabilized I was elastic and tough while the unstabilized I was brittle. Inherent viscosity figures were 0.85 before melting and 0.61 (stabilized) and 0.21 (unstabilized) after melting.

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18846-62-3 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1964:469741 CAPLUS Full-text

DOCUMENT NUMBER: 61:69741

ORIGINAL REFERENCE NO.: 61:12152d-e

TITLE: Acrylonitrile polymer solutions
INVENTOR(S): Logemann, Heino; Sueling, Carlhans
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.

SOURCE: 16 pp.

DOCUMENT TYPE: Patent
LANGUAGE: Unavailable

PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| | | | | | |
| | BE 635916 | | 19631202 | BE | |
| | FR 1365150 | | | FR | |
| RIOE | TTY APPIN INFO . | | | DE | 19620807 |

AB Acrylonitrile (I) copolymers and homopolymers are mixed with standard stabilizers and dissolved in HCONMe2, AcNMe2, or ethylene carbonate in the presence of 0.5-2% (by weight of polymer) SO2 to give solns. in which the stabilizer is potentiated by the SO2. Thus, 100 parts I-Me methacrylate (II) copolymer containing 95% I and 5% II is dissolved in 400 parts HCONMe2 under N in 11/2 hrs. at 75°, 0.5 part PhSOZNNHCSNH2, 0.1 part phthalic anhydride, and 0.1 part (HOZCCH2)2NCH2CH2N(CH2COZH)2 are added. The solution is kept 16 hrs. at 80°, and 1.5% (by weight of copolymer) SO2 is added (as a 20% solution in HCONMe2) to give an E/d (extinction) (620 mµ) of 0.00%; 0.016 for the control (absence of SO2).

18846-62-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18846-62-3 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

L4 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1962:475393 CAPLUS Full-text DOCUMENT NUMBER: 57:75393

ORIGINAL REFERENCE NO.: 57:14922i,14923a

TITLE: Reactions of aminoalkyl silicates with oxirane

compounds

AUTHOR(S): Emblem, H. G.; Hurt, N. A.

SOURCE: Journal of Applied Chemistry (1962), 12, 366-73

CODEN: JACHAU; ISSN: 0021-8871

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB Ethanolamine polysilicate, prepd. from Et polysilicate and ethanolamine,

reacts with propylene oxide to give products which gel when mixed with H2O. In contrast, products obtained by treating monoethanolamine orthosilicate or 2-aminobutyl orthosilicate with oxiranes are stable in aqueous solution If the aminoalkyl silicate contains unsubstituted organic groups, a self-condensation of the reaction product is possible. Properties and possible structures are discussed.

IT 18846-27-0P, 2-Butanol, 1,1'-[(2-hydroxyethyl)imino]di-,

silicate 18891-50-4P, 2-Propanol, 1,1'-[(2-hydroxyethyl)imino]di-, silicate 18995-35-8P,

Ethanol, 2,2',2''-nitrilotri-, silicate 106713-00-2P,

Z-Propanol, 1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate RL: PREP (Preparation)

(preparation of) RN 18846-27-0 CAPLUS

CN 2-Butanol, 1,1'-[(2-hydroxyethyl)imino]di-, N,N',N'',N'''-tetraester with silicic acid (H45i04) (8CI) (CA INDEX NAME)

но

O-CH2_CH2_N-CH2_CH_Et

OH

CH2_CH2_O-S1__R

Et-CH_CH2_N

OH

CH2_CH_Et

Et-CH_CH2_N

CH2_CH_Et

Et-CH_CH2

OH

CH2— CH2— CH2— CH2— CH — Et

R— O— CH2— CH2— CH2— CH— Et

RN 18891-50-4 CAPLUS

CN 7,9-Dioxa-4,12-diaza-8-silapentadecane-2,14-diol, 8,8-bis[2-[bis(2-hydroxypropyl)amino]ethoxy]- (8CI) (CA INDEX NAME)

RN 18985-35-8 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-[bis(2-hydroxyethyl)amino]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{OH} \\ \text{HO-CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH} \\ \end{array}$$

RN 106713-00-2 CAPLUS

CN 2-Propanol, 1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate (7CI) (CA INDEX NAME)

L4 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1962:475392 CAPLUS Full-text

DOCUMENT NUMBER: 57:75392
ORIGINAL REFERENCE NO.: 57:14922g-i

TITLE: Synthesis and pharmacological effects of bis(trialkylammonium)alkanol carbonates
AUTHOR(S): Pohorvles, Leo A.; Wislicki, L.; Sarel, Shalom

CORPORATE SOURCE: Hebrew Univ., Jerusalem, Israel

SOURCE: Journal of Pharmaceutical Sciences (1962), 51, 348-51 CODEN: JPMSAE; ISSN: 0022-3549

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB By the phosgenation of the appropriate o-dialkylaminoalkanol followed by the quaternization of the corresponding base by TWeI, the following bis(trialkylammonium) alkyl carbonate diiodides were prepared (m.p. and yield given): trimethyl-ammoniumethyl (I), 203-5°, 50-60%; 1-trimethylammonium-2propyl (II), 242°. 18%; 1-trimethylammonium-3propyl (III), 166-7°, 65%; 1-dimethylammonium-3propyl (IV), 189°, 40%; 1-diethylamethylammonium-3propyl (V), 197-9°, 60%; 1-trimethylammonium-4-butyl (VI), 186°, 57%; 1-trimethylammonium-4-butyl (VI), 186°, 57%; 1-trimethylammonium-4-butyl (VII), 280° (decomposition). - . Blood pressure was lowered without affecting the muscle twitch by I. Neuromuscular transmission and direct muscle excitability were depressed by VI, III, and I in that order. All effects were weaker in II, IV, V and VII.

IT 106713-00-2P, 2-Propanol,

1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate
RL: PREP (Preparation)

(preparation of)

RN 106713-00-2 CAPLUS

CN 2-Propanol, 1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate (7CI) (CA TNDEX NAME)

PAGE 2-A

L4 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1962:448753 CAPLUS Full-text

DOCUMENT NUMBER: 57:48753

ORIGINAL REFERENCE NO.: 57:9642a-c

TITLE: Alkoxides of vanadium(IV)
AUTHOR(S): Bradley, D. C.; Mehta, M. L.

SOURCE: Bradley, D. C.; Menta, M. L.

SOURCE: Canadian Journal of Chemistry (1962), 40, 1183-8

CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable
AB Reaction of VC14 and LiNEt2 for

Reaction of VC14 and LiNEt2 form V(NEt2)4, which, when treated with aliphatic alcohols, give alkoxides V(OR)4 (I). Since I is sensitive to 0 and moisture, preparation was done under N. Secondary and tertiary alkoxides were monomeric, but the primary alkoxides were strongly associated I resembled the Ti analog in vapor pressure measurements. I isolated were (R given): Me (decomposed at 200°); Et (b0.05 100-10°); Pr (b0.5 140-50°); iso-Pr (b0.1 70-80°); Bu (b0.5 150-60°); sec-Bu (b0.05 81°); iso-Bu (b0.05 114°); tert-Bu (b0.1 60-70°); Am (b0.5 160°); iso-Am (b0.1 112°); sec-Am (b0.5 142°); CHMePr (b0.05 110°); CHMePr-iso (b0.05 10°); CHMePr (b0.05 110°); CHMePr); CEST (b0.05 128°); CHMePr (b0.05 110°); CHMePr); CEST (b0.05 128°); CHMePr

- IT 18536-49-7 18846-62-3
- (Derived from data in the 7th Collective Formula Index (1962-1966))
- RN 18536-49-7 CAPLUS
- CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

RN 18846-62-3 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} -\text{CH2}-\text{CH2}-\text{CH2}-\text{N}\left(\text{Bu-n}\right)2 \\ (\text{n-Bu})2\text{N-CH2}-\text{CH2}-\text{CH2}-\text{CH2}-\text{N}\left(\text{Bu-n}\right)2 \\ -\text{CH2}-\text{CH2}-\text{N}\left(\text{Bu-n}\right)2 \end{array}$$

II 10367-06-6F, Ethanol, 2-(diethylamino)-, silicate
RL: PREP (Preparation)

RN 18867-06-6 CAPLUS

(preparation of)

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
(9 CITINGS)

L4 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1962:448752 CAPLUS Full-text DOCUMENT NUMBER: 57:48752

ORIGINAL REFERENCE NO.: 57:9642a

TITLE: Preparation and properties of some aminoalkoxysilanes AUTHOR(S): Emblem, H. G.; Harrison, A. K.

SOURCE: Journal of Applied Chemistry (1962), 12, 5-9

CODEN: JACHAU; ISSN: 0021-8871

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB The prepn. and properties of four tetrakis(aminoalkoxy)silanes and three tetrakis(2-aminoethoxy)silanes is described.

IT 18536-49-7 18846-62-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

RN 18846-62-3 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

IT 18867-06-6P, Ethanol, 2-(diethylamino)-, silicate

RL: PREP (Preparation) (preparation of) 18867-06-6 CAPLUS

RM

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1962:448751 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 57:48751

ORIGINAL REFERENCE NO.: 57:9641i,9642a

TITLE: Reactivity of organophosphorus compounds. XIII.
Radical-chain transfer reactions of triethyl
phosphite: a new phosphorothiolate synthesis

AUTHOR(S): Bunyan, P. J.; Cadogan, J. I. G.

CORPORATE SOURCE: Univ. London

SOURCE: Journal of the Chemical Society (1962) 2953-8 CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. CA 57, 4577c. Reinvestigation of the reaction between BrCCl3 and tri-Et phosphite has revealed the formation of CCl4 as a main product; reaction in the presence of BuSH gave S-Bu di-Et phosphorothioate in excellent yield. These and related reactions are discussed in terms of a radical-chain mechanism

IT 18536-49-7 18846-62-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

RN 18846-62-3 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dibutylamino)ethyl] ester (9CI) (CA INDEX NAME)

18867-06-6P, Ethanol, 2-(diethylamino)-, silicate RL: PREP (Preparation)

(preparation of) 18867-06-6 CAPLUS RN

Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) CN (CA INDEX NAME)

OS CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1962:18393 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 56:18393 ORIGINAL REFERENCE NO.: 56:3502c-d

TITLE: Silicate esters and related compounds

AUTHOR(S): Abbott, A. Doyle; Wright, James R.; Goldschmidt, Alfred; Stewart, William T.; Bolt, Robert O.

CORPORATE SOURCE: California Research Corp., Richmond

SOURCE: Journal of Chemical and Engineering Data (1961), 6,

437-42

CODEN: JCEAAX: ISSN: 0021-9568

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

-Data are given for phys. and chem. properties of 49 tetraalkoxysilanes, hexaaikoxydisilanes, polyalkoxysiloxanes, and bis(trialkoxysilyl) ethanes, phys. properties of 20 silicate derivs. of all phatic and aromatic diols, and 9 miscellaneous silicate derivs. A discussion of hydrolytic stability is given.

IT 18881-85-1, 2-Propanol, 1-(diethylamino)-, silicate (properties of)

RN 18881-85-1 CAPLUS

OS.CITING REF COUNT:

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L4 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1961:108859 CAPLUS 55:108859

DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 55:20454c-d TITLE:

Pigment dispersant for paint compositions INVENTOR(S): Koehler, James Oscar; Lamprey, Headlee

PATENT ASSIGNEE(S): Union Carbide Corp.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| | | | | |
| GB 863412 | | 19610322 | GB 1957-12166 | 19570415 |

AR Amino alc. derivs. of Si, Sn, and Pb of the general formula (RO)xM[OR'N(R'')2)]y [OX]z are dispersants for pigments in organic vehicles. Preferably, R is a C2-4 alkyl group; R' is an ethylene radical; R'' is either H or a C2-3 alkyl or alkoxy radical; x is 0 or 2, y is 0-4, z is 0-2; and X is a C10-18 alkyl or alkenyl group. A range of 0.5-2.0 weight % dispersant of the total paint composition is suitable for various pigment types.

ΙT 18985-35-8

(Derived from data in the 6th Collective Formula Index (1957-1961))

18985-35-8 CAPLUS RN

Silicic acid (H4SiO4), tetrakis[2-[bis(2-hydroxyethyl)amino]ethyl] ester CN (9CI) (CA INDEX NAME)



L4 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1961:108858 CAPLUS Full-text

DOCUMENT NUMBER: 55:108858 ORIGINAL REFERENCE NO.: 55:20454b-c TITLE: The development of suitable ascending solvents for

resins in paper chromatography
AUTHOR(S): Weigel, K.

SOURCE: Farbe + Lack (1961), 67, 294-8 CODEN: FALAAA; ISSN: 0014-7699

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The movement on filter paper of bleached shellar, Cellolyn 104, and two alkyds with respect to various alcs., esters, ketones, glycol ethers, aromatic, aliphatic, and chlorinated solvents was investigated in open air to develop a

simple identification method.

IT 18985-35-8

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 18985-35-8 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-[bis(2-hydroxyethyl)amino]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH} \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH} \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{OH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 \\ \mathsf{CH}_2 - \mathsf{CH}_2 -$$

L4 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1960:33829 CAPLUS Full-text

DOCUMENT NUMBER: 54:33829

ORIGINAL REFERENCE NO.: 54:6519g-i,6520a

TITLE: Alkanolamine silicate derivatives
AUTHOR(S): Koehler, J. O.; Lamprey, H.

CORPORATE SOURCE: Natl. Carbon Research Labs., Parma, O.

SOURCE: Advances in Chemistry Series (1959), 23, 217-24

CODEN: ADCSAJ; ISSN: 0065-2393

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

IT

AB Et2NCH2CH2OH (238.9 g.) and 212.5 g. (Et0)4Si were heated until EtOH evolution ceased and then distilled to give 95% (Et0)2Si(CCH2CH2NET2)2, b7 160-2°.

Alternately, to 189 g. (Et0)2Sic12 in 300 ml. of dry C6H6 was added 305 g.

HOCH2CH2NH2 (the temperature kept below 20°), the whole refluxed 1 hr., cooled, filtered and the filtrate distilled to give 90% (Et0)2Si(CCH2CH2NH2)2,

Cooled, Filtered and the filtrate distilled to give 90% (EU)231(UALPARA)2, b7 96-7%. The first procedure was used to prepare the following (Eto)251(OR)2 derivs. (R, % yield, and b.p./mm. given): HOCH2CH2NHCH2CH2, 98, -; HOCH2CH2)2NCH2CH2, 100, -; ENHCH2CH2, 99, 111°(2; EE)2RCH2CH2, 100, 180°/7; Bu2NCH2CH2, 92, 139-40°/0.8; (BuEtCHCH2)2NCH2CH2, 100, -; iso-Pr2NCH2CH2, 96, 135°/1.0; PhNHCH2CH2, 96, 118°/0.3; PhETMCH2CH2, 95, 138°/0.3; PhCH2MHCH2CH2, 100, 135°/0.3; (HOCHCH)2NCH2CH2, 93, -; iso-Pr2NCH2CHMe, 95, 117-18°/1.0;

H2NCH2CHMe, 98, 110-11°/6.0. Also the following: Bu2Si[OCH2CH2N(CH2CH2OH)2]2, 96, -; (PrO)2Si{OCH2CH2N[OCH2CH2N(CH2CH2OH)2]2}2, 95, -;

SijOCHZCHZN(CHZCH2OH)2]4, 94 -. Quaternary salts were also prepared from (MeO)2SijOCHZCHZN(CHZCH2OH)2]2 and lauric, palmitic, stearic, oleic,

ricinoleic, linoleic and eleostearic acid (no phys. properties given). These compds. are useful in resins, rubber, and paints.

18985-35-8 (Derived from data in the 6th Collective Formula Index (1957-1961))

L4 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1960:33828 CAPLUS Full-text DOCUMENT NUMBER: 54:33828

ORIGINAL REFERENCE NO.: 54:6519a-q

RN

TITLE: Synthesis of alkylsilylphosphines

AUTHOR(S): Parshall, G. W.; Lindsey, R. V., Jr.

CORPORATE SOURCE: E.I. du Pont de Nemours & Co., Wilmington, DE SOURCE: Journal of the American Chemical Society (1959), 81,

6273-5 CODEN: JACSAT: ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

A series of alkylsilylphosphines was synthesized from alkylchlorosilanes with Li derivs. of PH3 and substituted phosphines. BuLi from 8.5 g. Li, 68.5 g. BuBr, and 900 cc. dry Et20 treated under N with a stream of PH3 during about 1 hr., the resulting yellow slurry treated with stirring during 15 min. at 0-10° with 50 g. Me3SiCl (I), warmed to room temperature, filtered under N, and the filtrate diluted under 5 mm. pos. pressure gave 0.4 g. Me3SiPH2 (II), spontaneously flammable liquid, b. 69-73°, 12.3 q. (Me3Si) 2PH (III), spontaneously flammable liquid, b. 170-2°, n25D 1.4637, and 8.2 g. (Me3Si)3P (IV), b. 242-3°, n25D 1.5027. A similar run in which the PH3 was passed over the surface of the BuLi solution yielded 45% IV. BuLi in Et20 added dropwise to Et20 saturated with PH3 and the mixture treated with I gave 30% II, b. 77.5°, n25D 1.4368. BuLi from 1.75 g. Li, 13.7 g. BuBr, and 60 cc. Et2O treated with stirring at 0° under N with 15.0 g. III in 10 cc. Et2O during 10 min., the mixture treated rapidly with 9.2 g. I, warmed to room temperature under N, and filtered, and the filtrate distilled gave 13.8 g. IV, b. 243-4°, n25D 1.5028. IV (0.90 g.) in 9 cc. tetrahydrofuran cooled to -190°, evacuated to 0.02 mm., treated with diborane (150 cc. at 27°/224 mm.), sealed in a Carius tube, and evaporated in vacuo, and the sticky residue sublimed at 0.01 mm. gave crystalline (Me3Si)3P.BH3, m. 100-7° (decomposition); it decompose slowly at room temperature and forms moderately stable solns. in dry Me2C1, tetrahydrofuran, and Me2CO. IV (2.9 g.) in 10 cc. PhCl treated dropwise with stirring at 0° with 0.7 g. NO2 in 10 cc. PhCl, the excess NO2 evaporated, and the residue distilled gave 1.4 cc. (Me3SiO)3PO, b0.2 48-50° n25D 1.40-87, and 0.4 q. (Me3Si)2O, b. 101-2°, n25D 1.3837. PH3 rapidly bubbled through BuLi from 8.5 g. Li, 68.5, g. BuBr, and 300 cc. Et2O, the mixture treated dropwise at 0° with stirring with 60 cc. Et2SiC12 (V), warmed to room temperature, filtered under N, and distilled gave 3.5 cc. 2,2,4,4-tetraethyl-1,3-diphospha-2,4-disiletane (VI), b0.06 107-10°, n25D 1.5829, and 3.8 cc. 2,2,4,4,5,5-hexaethyl-1,3-diphospha-2,4,5-trisilabicyclo[1.1.1]heptane, b0.05 130-4°, n25D 1.6012. PhLi from 3.0 g. Li, 31.4 g. PhBr, and 150 cc. Et20 treated during 10 min. with 9.1 g. PhPH2, the mixture stirred 1 hr. at room

temperature, treated dropwise with 11.8 cc. V during 10 min., stirred 2 hrs., filtered, and distilled gave 3.5 g. 1,3-di-Ph derivative of VI, b0.02 151-3°, needles, m. 43-7° (petr. ether). BuLi from 2.1 g. Li, 16.0 g. BuBr, and 75 cc. Et20 treated with stirring and cooling at 0-10° with 6.1 g. II in 25 cc. Et20 during 10 min., warmed to room temperature, filtered under N, and distilled gave 1.6 cc. 1,3-di-Me35i derivative of VI, b0.2 96-8°, n25D 1.5522; it solidified to needles slightly below room temperature

IT 18985-35-6 (Derived from data in the 6th Collective Formula Index (1957-1961))

RN 18985-35-8 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-[bis(2-hydroxyethyl)amino]ethyl] ester (9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L4 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1959:111252 CAPLUS

DOCUMENT NUMBER: 53:111252

ORIGINAL REFERENCE NO.: 53:19877a-c

TITLE: Chloromethylated O,O-dialkylthiophosphates
INVENTOR(S): Scherer, Otto; Hahn, Helmut; Stahler, Gerhard

PATENT ASSIGNEE(S): Farberke Hoechst AG vorm. Meister Lucius & Bruning
DOCUMENT TYPE: Patent

LANGUAGE: Facent
Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APE | PLICATION NO. | | DATE | | |
|----|-------------|----------------|-------------|-----|---------------|---------|------|------|---|
| | | | | | | | | | |
| | DE 1015794 | | 19570919 | DE | 1955-F19209 | | 1955 | 1231 | |
| | US 3020304 | | 19620206 | US | 1957-684403 | | 1957 | 0917 | |
| AB | K O.O-di-Et | thionothiolpho | sphate (336 | a.) | and 1000 g. | BrCH2C1 | (I) | was | h |

AB K 0,0-di-Et thionothiolphosphate (336 g.) and 1000 g. BrCH2C1 (I) was heated 24 hrs. at 60°, the KBr filtered off, and the I distilled to give S-chloromethyl-0,0-diethyl thionothiolphosphate, bl 93-5°; Similarly were prepared: S-chloromethyl 0,0-dimethyl thionothiolphosphate, bl 10 100°; O-chloromethyl 0,0-diethyl thionophosphate, bl.5 118-22°. The compds. thus prepared were useful as insecticides.

IT 18536-49-7

(Derived from data in the 6th Collective Formula Index (1957-1961)) RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

L4 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1959:111251 CAPLUS

DOCUMENT NUMBER: 53:111251

ORIGINAL REFERENCE NO.: 53:19876i,19877a

TITLE: Aminoalkyl silicates

INVENTOR(S): Beinfest, Sidney; Adams, Phillip; Milius, Howard

PATENT ASSIGNEE(S): Berkeley Chemical Corp.

DOCUMENT TYPE: Berkeley Chemical Corp

LANGUAGE: Patent
Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------|
| | | | | |
| US 2885419 | | 19590505 | US 1956-612058 | 195609 |

AB A new chemical, tetrakis(diethyl-aminoethyl) silicate (I), was used as a stone preservative, weather proofing and H2O proofing agent. I was prepared by mixing 522 g. 2-(diethylamino)ethanol (II) and 208 g. Et silicate and heating at 110°; after 5 hrs. 95% EtOH had distilled The pressure was lowered and the EtOH plus excess II distilled was 437 g., consisting of 90% liquid, b. 225-30°/5 mm., d25 0.922. Similarly were prepared: tetrakis(dimethylaminoethyl) silicate, b. 168-73°/6 mm.; bis(β-diethylaminoethyl)dicetyl silicate; dicetylbis(2-aminoethyl) silicate; monocetyltris(β-diethylaminoethyl) silicate, and bis(β-aminoethyl)ditridecyl silicate, d25 0.912.

IT 18536-49-7

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 18536-49-7 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

IT 19867-00-6P, Ethanol, 2-diethylamino-, silicate RL: PREP (Preparation)

(preparation of)

RN 18867-06-6 CAPLUS

CN Silicic acid (H4SiO4), tetrakis[2-(diethylamino)ethyl] ester (8CI, 9CI) (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

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